

CLAIMS

What is claimed is:

- 5 1. A parking meter for monitoring an adjacent parking space comprising:
 - a transmitter,
 - a unique identification code,
 - a vehicle presence detector for conveying occupancy
 - 10 status of the adjacent parking space, the vehicle presence detector being coupled to the transmitter,
 - a camera for acquiring at least one image of a license plate of a vehicle parked in the adjacent parking space,
 - the camera being coupled to the transmitter,
 - 15 wherein the transmitter can communicate the unique identification code, the occupancy status, and the image to a receiver.
2. The parking meter according to claim 1, wherein the
- 20 transmitter can communicate via one or more of: Internet, World Wide Web, intranet, extranet, virtual private network, cellular network, telephone network, fiber optic network, cable network, satellite network, and GPS link.

3. The parking meter according to claim 1, comprising additionally a light source to illuminate the license plate when acquiring the image.

5 4. The parking meter according to claim 1, comprising an authorization input device for producing an authorization request, the authorization input device being coupled to the transmitter, and wherein the transmitter can communicate the authorization request to the receiver.

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5. The parking meter according to claim 4, wherein the authorization input device comprises at least one of a payment input and a user identity input.

15 6. The parking meter according to claim 4, further comprising a meter controller coupled to the vehicle detector, the camera, the authorization input device, wherein the meter controller can selectively generate a parking violation signal as a function of the authorization
20 request, and the transmitter can communicate the parking violation signal.

7. The parking meter according to claim 4, comprising a display output coupled to the authorization input device.

8. The parking meter according to claim 7, comprising a meter receiver coupled to the display.

5 9. The parking meter according to claim 4, comprising a parking meter body encased in a sheet of titanium.

10. A system for parking enforcement comprising:

10 a plurality of parking meters, each parking meter comprising

a transmitter,

a unique identification code,

a vehicle presence detector for conveying

15 occupancy status of an adjacent parking space, the vehicle presence detector being coupled to the transmitter,

a camera for acquiring at least one image of a license plate of a vehicle parked in the adjacent

20 parking space, the camera being coupled to the transmitter,

wherein the transmitter can communicate the corresponding unique identification code, the occupancy status, and the image;

at least one receiver for communicating with the
transmitter,

a database comprising

the plurality of unique identification codes,

5 a parking meter location associated with each
unique identification code, and

a parking permission type associated with each
unique identification code,

a timer to measure a duration of occupancy,

10 a controller coupled to the database, the receiver,
and the timer, the controller selectively generating a
parking violation signal as a function of the corresponding
occupancy status, permission type, and duration of
occupancy, and

15 a mail distribution center that receives from the
controller the parking violation signal, the corresponding
parking meter location, and the image.

11. The system according to claim 10 wherein the mail
20 distribution center responds to the parking violation
signals by least one of dispatching tow trucks to the
parking meter location and sending parking tickets to
owners of vehicles.

12. The system according to claim 10 wherein at least a subset of the plurality of parking meters each additionally comprises an authorization input device for producing an authorization request, the authorization input device being
5 coupled to the transmitter, wherein the transmitter can communicate the authorization request to the receiver, and the controller generating the parking violation signal additionally as a function of the corresponding authorization request.

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13. The system according to claim 12 wherein the authorization input device is a payment input.

14. The system according to claim 12 comprising a database
15 of parking user accounts coupled to the controller, each user account having an associated user identity code and user account information, wherein the authorization input device is a user identity input for entering the user identity code, the controller generating the parking
20 violation signal additionally as a function of user account information, and the controller being capable of updating the user account information.

15. The system according to claim 12, comprising at least one controller transmitter and wherein at least a subset of the plurality of meters have meter receivers for communicating with the controller transmitter, and output
5 displays coupled to the meter receivers.

16. The system according to claim 15, further comprising a database of critical Amber Alert details coupled to the controller, whereby the critical Amber Alert details can be
10 sown on the output displays.

17. The system according to claim 14, wherein the image is a digital image, the license plate number is extracted from the digital image, and the controller generates the parking
15 violation signal additionally as a function of the extracted license plate number.

18. The system according to claim 10, wherein the image is a digital image and the license plate number is extracted
20 from the digital image, the system comprising a list of one or more sought license plate numbers coupled to the controller, and wherein the controller compares extracted license plate numbers to each sought license plate number to generate a sought license plate matching signal, and the

mail distribution system receives the sought license plate matching signal.

19. A method for parking enforcement comprising:

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obtaining a vehicle presence indication when a vehicle is parked in a monitored parking space,

obtaining an image of a license plate of the vehicle,

communicating the vehicle presence indication and the

10 license plate image to a controller,

selectively generating by the controller a parking

violation signal as a function of parking meter location

and duration of occupancy, and

communicating the parking violation signal to a mail

15 distribution center.

20. The method according to claim 19 further comprising

obtaining a parking user authorization request

20 communicating the authorization request to the controller,

and

selectively generating by the controller a parking

violation signal as a function additionally of the

authorization request signal.

21. The method according to claim 20 further comprising

encrypting the authorization request after obtaining the
5 authorization request, and

decrypting the authorization request after communicating
the authorization request.

22. The method according to claim 20 wherein the
10 authorization request signal comprises a parking user
identification code, the method comprising

accessing by the controller a database of parking user
accounts comprising parking user identification codes
associated with parking user account information, and
15 selectively generating by the controller a parking
violation signal as a function additionally of the parking
user account information.

23. The method according to claim 22 comprising
20 measuring parking duration,

transmitting the parking duration and the parking user
identification code to the database of parking user
accounts, and

updating the account information associated to the parking user identification code.

24. The method according to claim 19 comprising

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digitizing the image,

extracting a license plate number from the image,

comparing the extracted license plate number to one or more sought license plate number,

10 generating a sought license plate matching signal when the extracted license plate number matches the sought license plate number,

communicating the sought license plate matching signal to the mail distribution center.

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25. The method according to claim 24, wherein the sought license plate number is a critical Amber Alert detail.